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IMAGES IN CARDIOLOGY

Multislice Gated-Computed Tomography of Cardiac Paragangliomas

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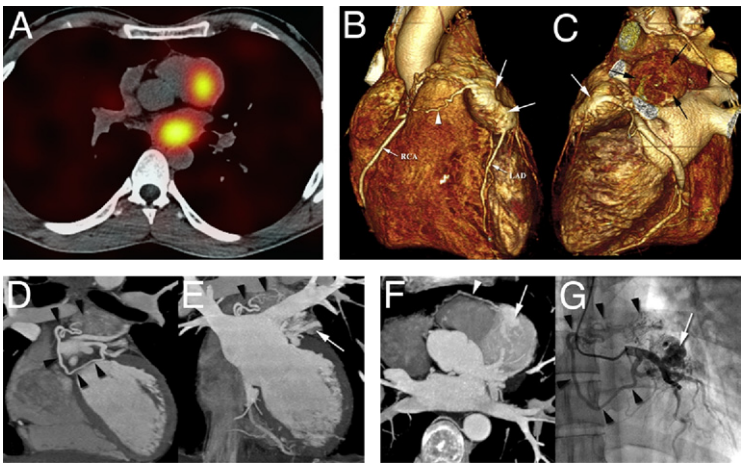

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A 28-year-old man presented with paroxysmal hypertension (161/114 mm Hg) and tachycardia (131 beats/min). Urinary noradrenaline was 4,892 nmol/24 h (normal <498), and serum chromogranine A was 210 μg/l (normal 19.4 to 98.1 μg/l). A metaiodobenzylguanidine scintigraphy and a computed tomography (CT) scan with single-photon emission-CT fusion revealed 2 high mediastinal uptakes and 1 retroperitoneal uptake respecting adrenal glands **(A)**. A 64-multidetector gated CT demonstrated 2 highly vascularized cardiac tumors (**B to F**, Online Video 1): 1 anterior, lying above the left anterior descending coronary artery (LAD) **(white arrows)**; 1 posterior, above the left atrium **(black arrows)**. The feeding vessels for the anterior tumor originated from the LAD and from a small branch of the right coronary artery **(white arrowheads)**. The feeding vessel for the posterior tumor was a branch of the circumflex artery **(black arrowheads)**. Coronary angiography confirmed the triple origin of the feeding vessels (**G**, Online Video 2). The tumors could be completely resected with a LAD bypass graft. Histopathologic examination (images not available) confirmed paragangliomas. Genetic testing showed deletion of succinate dehydrogenase subunit D.